

Fire lines and fire breaks

How not to burn up your neighbors pines...

Selection, design and management...





Fire lines do not control smoke...



Definitions...

- Fire line – any constructed disruption in a fuel source to stop or control the spread of fire or provide a line from which to suppress a fire
- Fire break – a naturally, or already existing fuel break such as a creek, green farm field, road, pond , lake, etc.
- Whether constructed or existing – should be adequate to STOP a fire under all but the most extreme circumstances

Features...things to keep in mind...

- Use existing fire breaks when possible, saves time...if they are adequate
- Are they wide enough to control the fire???
- Should have no fuel (well – a little is OK and realistic)
- No sharp turns – WHY?????
- Should be fully traversable (that means “I can git acrossed it...” for you folks from the mountains...LOL)
- Again – why????







Fire line planning / considerations

- Keep on contours when possible
- Install water bars on steep areas
- Prepare well in advance if possible (but recognize some touch up may be required)
- Use “ring-arounds” within burn areas to protect critical habitats / features within the burn unit
- Think about changes in wind directions – winds do change – consider your fire lines from all wind directions, not just the preferred wind direction



Seeding fire lines – quick notes

- Why? If the lines were created in fall, they have to lay all winter and are subject to erosion
- Can serve as hunting areas during winter
- Seed to wheat or rye in fall...can be re-disked before burn, or usually can be used as is...
- After burn is conducted – can top sow clover, Korean or Kobe lespedeza, partridge pea, etc.
- Not as important if lines are constructed in spring, as native cover will come up quickly, but a cheap annual can be used like millet, milo, etc.

Partridge pea is one good choice...





Sun versus shade...fall versus spring



Alright, Wake Up...



Fire line types

- Fire plowed (usually a dozer type plow through wooded areas – not necessary in fields)
- Disked 6' to 12', single or double pass, down to bare dirt
- Mowed lines (only in limited situations – can be used for strip firing in fields)
- Wet lines (can be used with mowed lines) – again special circumstances, by experienced burners
- Double, or paired lines (burn out section in between lines to widen)

A note on disked fire lines...

- School of hard knocks...lessons not forgotten
- If you will be operating 4-wheeler, UTV, tractor, etc. to patrol around lines, or use in lighting fire from the lines...need to disk smooth enough to be able to ride over...if too bumpy, tools fall out, splashes drip torches, causes accidents, etc., slows response times, etc.





Paired, or double lines

- Used in situations where problem areas occur
- Provides extra comfort zone
- Creates wider line without excessive disking
- Disk two standard lines, leaving 10' to 20' of undisked area between them, then burn out the area between the lines before the burn, or on the day of the burn
- Effectively triples or quadruples the width of fire lines



Paired Fire Lines

Double disk 10' wide; skip 20'; double disk 10' wide

Disk to bare soil

Burn out fuel prior to prescribed burn

Disk to bare soil





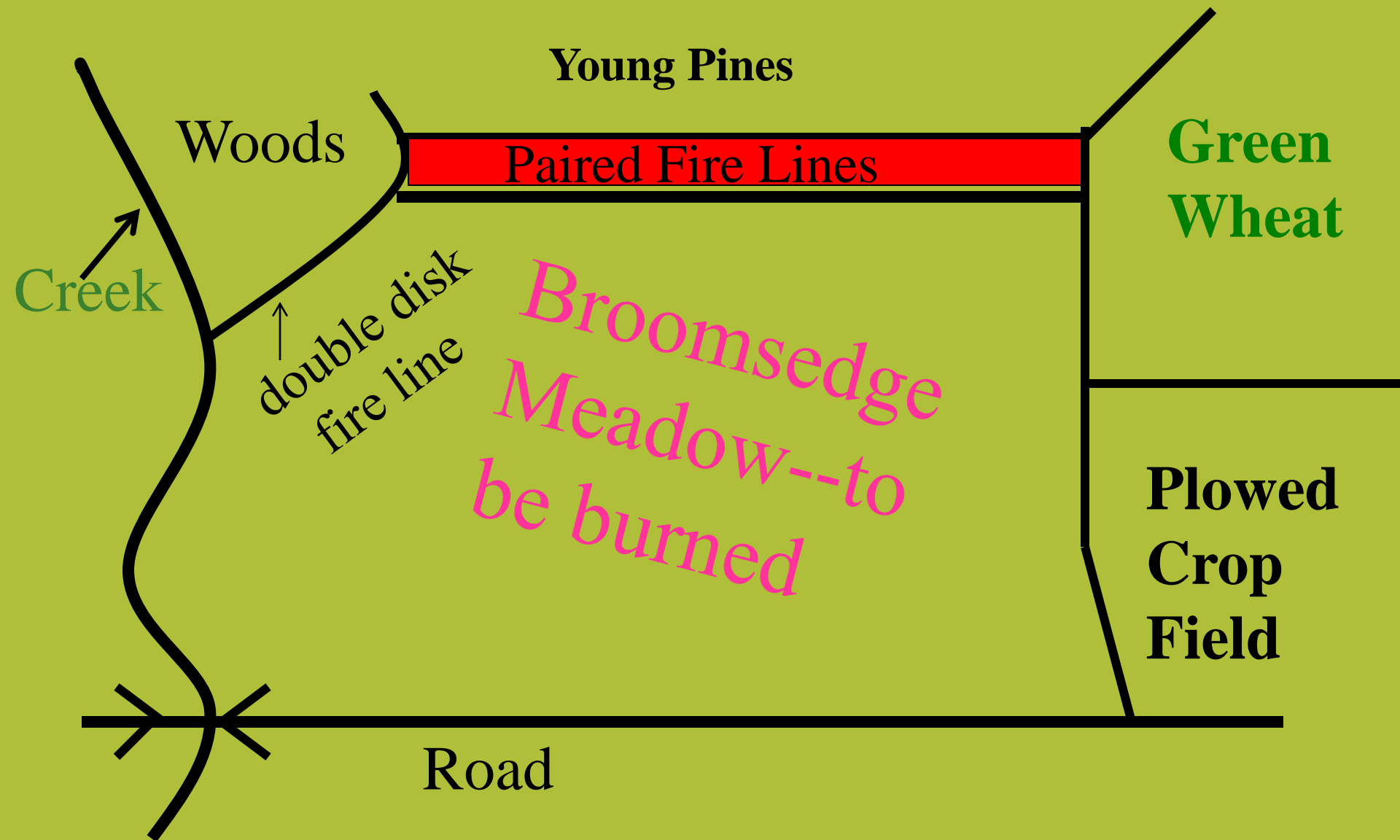
Caution situations...

- SMOKE – roads, traffic, etc.
- Wood fences, utility poles
- Haystacks / fields / barns
- Young pine stands
- Large slash piles (particularly near fire lines)
- Other situations / fuels – use good sense / judgement

Handling challenging areas

- Use double / paired lines
- Mow tall fuels next to lines to reduce flame height
- Backfire to increase effective width of lines before using strip head fire, head fire or some combination
- Or simply use backing fire for the entire burn, lighting off internal fire lines (explain...???)

The Whole Enchilada



Questions...?????

